

08/501,872

\* \* \* \* \*

=> s active alumina catalyst

323449 ACTIVE

80648 ALUMINA

157309 CATALYST

L1 22 ACTIVE ALUMINA CATALYST

(ACTIVE (W) ALUMINA (W) CATALYST)

=> s l1 and sodium

272719 SODIUM

L2 13 L1 AND SODIUM

=> d 1-

1. 5,453,557, Sep. 26, 1995, Processes for converting chlorinated byproducts and waste products to useful materials; A. Dale Harley, et al., 585/641; 570/216, 230; 585/642 [IMAGE AVAILABLE]

2. 5,430,215, Jul. 4, 1995, Selective hydrodechlorination of 1,2,3-trichloropropane to produce propylene; Mark D. Cisneros, 585/642, 638, 641, 654, 657, 660 [IMAGE AVAILABLE]

3. 5,250,737, Oct. 5, 1993, Process for hydrocarbyl trisulfide product; Nubar Ozbalik, 568/21, 26 [IMAGE AVAILABLE]

4. 5,242,613, Sep. 7, 1993, Process for mixed extreme pressure additives; Nubar Ozbalik, et al., 252/46.7, 46.6 [IMAGE AVAILABLE]

5. 5,167,844, Dec. 1, 1992, Lubricant formulations; Rolf Schumacher, et al., 252/32.7R, 32.5, 46.6 [IMAGE AVAILABLE]

6. 4,982,011, Jan. 1, 1991, Production of ether/ether-alcohol compositions; Jean A. A. Hanin, 568/678; 252/364; 568/591, 594, 671 [IMAGE AVAILABLE]

7. 4,735,743, Apr. 5, 1988, Ether-containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 252/364; 106/311 [IMAGE AVAILABLE]

8. 4,683,343, Jul. 28, 1987, Ether-containing mixtures in flexible PVC; Jean A. Hanin, et al., 568/594, 671 [IMAGE AVAILABLE]

9. 4,658,068, Apr. 14, 1987, Hydroformylation of olefins; Jean A. A. Hanin, 568/451, 492, 883 [IMAGE AVAILABLE]

10. 4,656,215, Apr. 7, 1987, Ether containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 524/376, 378, 569 [IMAGE AVAILABLE]

11. 4,122,156, Oct. 24, 1978, Process for the production of carbon disulfide from sulfur dioxide removed from a flue gas; James R. Kittrell,

et al., 423/443, 416, 570 [IMAGE AVAILABLE]

12. 4,080,390, Mar. 21, 1978, Process for the production of  
o-phenylphenol; Juichi Imamura, 568/747; 502/243, 327 [IMAGE AVAILABLE]

13. 3,879,310, Apr. 22, 1975, Surface stabilized active alumina; Ronald  
J. Rigge, et al., 502/208; 423/625, 626, 628; 585/667, 671, 906 [IMAGE  
AVAILABLE]

=> s l2 and silica

140587 SILICA

L3 12 L2 AND SILICA

=> s l3 and clay

46991 CLAY

L4 0 L3 AND CLAY

=> s l3 and silicate

48042 SILICATE

L5 0 L3 AND SILICATE

=> s l3 and barium sulfate

48780 BARIUM

132506 SULFATE

10617 BARIUM SULFATE

(BARIUM(W) SULFATE)

L6 0 L3 AND BARIUM SULFATE

=> s l3 and calcium sulfate

144811 CALCIUM

132506 SULFATE

11398 CALCIUM SULFATE

(CALCIUM(W) SULFATE)

L7 0 L3 AND CALCIUM SULFATE

=> s l3 and ammonium sulfate

144874 AMMONIUM

132506 SULFATE

14397 AMMONIUM SULFATE

(AMMONIUM(W) SULFATE)

L8 0 L3 AND AMMONIUM SULFATE

=> s l3 and ceramic fiber#

94357 CERAMIC

184386 FIBER#

4419 CERAMIC FIBER#

(CERAMIC(W) FIBER#)

L9 0 L3 AND CERAMIC FIBER#

=> s l3 and asbestos fiber#

20360 ASBESTOS

184386 FIBER#

3364 ASBESTOS FIBER#

(ASBESTOS (W) FIBER#)

L10 0 L3 AND ASBESTOS FIBER#

=> s l3 and barium

48780 BARIUM

L11 0 L3 AND BARIUM

=> s l3 and calcium

144811 CALCIUM

L12 6 L3 AND CALCIUM

=> d 1-

1. 5,453,557, Sep. 26, 1995, Processes for converting chlorinated byproducts and waste products to useful materials; A. Dale Harley, et al., 585/641; 570/216, 230; 585/642 [IMAGE AVAILABLE]

2. 5,250,737, Oct. 5, 1993, Process for hydrocarbyl trisulfide product; Nubar Ozbalik, 568/21, 26 [IMAGE AVAILABLE]

3. 5,242,613, Sep. 7, 1993, Process for mixed extreme pressure additives; Nubar Ozbalik, et al., 252/46.7, 46.6 [IMAGE AVAILABLE]

4. 4,735,743, Apr. 5, 1988, Ether-containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 252/364; 106/311 [IMAGE AVAILABLE]

5. 4,683,343, Jul. 28, 1987, Ether-containing mixtures in flexible PVC; Jean A. Hanin, et al., 568/594, 671 [IMAGE AVAILABLE]

6. 4,656,215, Apr. 7, 1987, Ether containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 524/376, 378, 569 [IMAGE AVAILABLE]

=> s l12 and cellulose

106262 CELLULOSE

L13 0 L12 AND CELLULOSE

=>

08/501,872

\* \* \* \* \*

=> s catalyst

L1 157309 CATALYSTs l1 and active alumina

=>

323449 ACTIVE

80648 ALUMINA

814 ACTIVE ALUMINA

(ACTIVE(W)ALUMINA)

L2 635 L1 AND ACTIVE ALUMINA

=> s l2 and sodium

272719 SODIUM

L3 325 L2 AND SODIUM

=> s l3 and 2700 ppm

6623 2700/BI

2103 2,700/BI

8555 2700

((2700 OR 2,700)/BI)

81631 PPM

81 2700 PPM

(2700(W)PPM)

L4 0 L3 AND 2700 PPM

=> s l3 and silica

140587 SILICA

L5 240 L3 AND SILICA

=> s l5 and zirconium

33727 ZIRCONIUM

L6 49 L5 AND ZIRCONIUM

=> s l6 and clay

46991 CLAY

L7 11 L6 AND CLAY

=> s l7 and cellulose

106262 CELLULOSE

L8 4 L7 AND CELLULOSE

=> s l8 and Claus

1509 CLAUS

L9 0 L8 AND CLAUS

=> s l1 and claus

1509 CLAUS

L10 856 L1 AND CLAUS

=> d his

(FILE 'USPAT' ENTERED AT 09:06:55 ON 28 JUN 96)

L1 157309 S CATALYST

L2 635 S L1 AND ACTIVE ALUMINA

L3 325 S L2 AND SODIUM

L4 0 S L3 AND 2700 PPM

L5 240 S L3 AND SILICA

L6                49 S L5 AND ZIRCONIUM  
 L7                11 S L6 AND CLAY  
 L8                4 S L7 AND CELLULOSE  
 L9                0 S L8 AND CLAUS  
 L10               856 S L1 AND CLAUS  
 => s l10 and active alumina  
                  323449 ACTIVE  
                  80648 ALUMINA  
                  814 ACTIVE ALUMINA  
                  (ACTIVE(W)ALUMINA)  
 L11               32 L10 AND ACTIVE ALUMINA  
 => s l11 and sodium  
                  272719 SODIUM  
  
 L12               11 L11 AND SODIUM  
 => s l12 and (silica or zirconium)  
                  140587 SILICA  
                  33727 ZIRCONIUM  
 L13               8 L12 AND (SILICA OR ZIRCONIUM)  
 => s l13 and clay  
                  46991 CLAY  
 L14               0 L13 AND CLAY  
 => s l13 and (silicate or ceramic)  
                  48042 SILICATE  
                  94357 CERAMIC  
 L15               0 L13 AND (SILICATE OR CERAMIC)  
 => s l13 and (calcium or barium)  
                  144811 CALCIUM  
                  48780 BARIUM  
 L16               6 L13 AND (CALCIUM OR BARIUM)  
 => s l13 and calcium sulfate  
                  144811 CALCIUM  
                  132506 SULFATE  
                  11398 CALCIUM SULFATE  
                  (CALCIUM(W)SULFATE)  
 L17               0 L13 AND CALCIUM SULFATE  
 => s l13 and barium sulfate  
                  48780 BARIUM  
                  132506 SULFATE  
                  10617 BARIUM SULFATE  
                  (BARIUM(W)SULFATE)  
 L18               0 L13 AND BARIUM SULFATE  
 => s l16 and cellulose  
                  106262 CELLULOSE  
 L19               1 L16 AND CELLULOSE  
 => d

1. 5,244,648, Sep. 14, 1993, Process for the preparation of alumina agglomerates; Thierry Dupin, et al., 423/626; 23/313R; 423/628; 502/355, 415 [IMAGE AVAILABLE]  
=> d ab

US PAT NO: 5,244,648 [IMAGE AVAILABLE]

L19: 1 of 1

ABSTRACT:

Provided is a process for preparing alumina agglomerates which comprises:

- (i) treating agglomerates of **\*\*active\*\* alumina\*\*** with an aqueous medium comprising at least one acid making it possible to dissolve at least part of the alumina and at least one compound providing an anion capable of combining with aluminum ions in solution,
- (ii) subjecting the agglomerates to a hydrothermal treatment at a temperature in the range of from about 80.degree. C. to about 250.degree. C., and then
- (iii) thermally activating the agglomerates at a temperature in the range of about 500.degree. C. to about 1100.degree. C.

The resulting alumina agglomerates possess exceptional mechanical strength, heat resistance and hydrothermal resistance and are useful as catalysts or **\*\*catalyst\*\*** supports.

=> s l13 and ammonium sulfate

144874 AMMONIUM

132506 SULFATE

14397 AMMONIUM SULFATE

(AMMONIUM(W) SULFATE)

L20 0 L13 AND AMMONIUM SULFATE

=>

=> d his

(FILE 'USPAT' ENTERED AT 09:06:55 ON 28 JUN 96)

L1 157309 S CATALYST  
L2 635 S L1 AND ACTIVE ALUMINA  
L3 325 S L2 AND SODIUM  
L4 0 S L3 AND 2700 PPM  
L5 240 S L3 AND SILICA  
L6 49 S L5 AND ZIRCONIUM  
L7 11 S L6 AND CLAY  
L8 4 S L7 AND CELLULOSE  
L9 0 S L8 AND CLAUS  
L10 856 S L1 AND CLAUS  
L11 32 S L10 AND ACTIVE ALUMINA  
L12 11 S L11 AND SODIUM  
L13 8 S L12 AND (SILICA OR ZIRCONIUM)  
L14 0 S L13 AND CLAY  
L15 0 S L13 AND (SILICATE OR CERAMIC)  
L16 6 S L13 AND (CALCIUM OR BARIUM)  
L17 0 S L13 AND CALCIUM SULFATE  
L18 0 S L13 AND BARIUM SULFATE  
L19 1 S L16 AND CELLULOSE  
L20 0 S L13 AND AMMONIUM SULFATE

=> s 12 and (silica or titanium or zirconium or tin or nickel)

1684405 12  
140587 SILICA  
101867 TITANIUM  
33727 ZIRCONIUM  
72348 TIN  
111340 NICKEL

L21 264869 12 AND (SILICA OR TITANIUM OR ZIRCONIUM OR TIN OR NICKEL)

=> s 112 and (silica or titanium or zirconium or tin or nickel or iron)

140587 SILICA  
101867 TITANIUM  
33727 ZIRCONIUM  
72348 TIN  
111340 NICKEL  
164413 IRON

L22 8 L12 AND (SILICA OR TITANIUM OR ZIRCONIUM OR TIN OR NICKEL O  
R I  
RON)

=>

=> s 122 and (clay or silicate or ceramic or asbestos)

46991 CLAY  
48042 SILICATE

94357 CERAMIC

20360 ASBESTOS

L23 0 L22 AND (CLAY OR SILICATE OR CERAMIC OR ASBESTOS)

=> s l22 and (clay or silicate)

46991 CLAY

48042 SILICATE

L24 0 L22 AND (CLAY OR SILICATE)

=> s l22 and (silicate or ceramic)

48042 SILICATE

94357 CERAMIC

L25 0 L22 AND (SILICATE OR CERAMIC)

=>



\* \* \* \* \*

=> s catalyst

L1 157309 CATALYST

=> s l1 and active alumina

323449 ACTIVE

80648 ALUMINA

814 ACTIVE ALUMINA

(ACTIVE(W) ALUMINA)

L2 635 L1 AND ACTIVE ALUMINA

=> s l2 and sodium

272719 SODIUM

L3 325 L2 AND SODIUM

=> s l3 and silica

140587 SILICA

L4 240 L3 AND SILICA

=> s l4 and zirconium

33727 ZIRCONIUM

L5 49 L4 AND ZIRCONIUM

=> s l5 and clay

46991 CLAY

L6 11 L5 AND CLAY

=> s l6 and cellulose

106262 CELLULOSE

L7 4 L6 AND CELLULOSE

=> d 1-

1. 5,498,478, Mar. 12, 1996, Polyethylene glycol as a binder material for fibers; Michael R. Hansen, et al., 428/372, 243, 281, 283, 357, 359, 375, 393 [IMAGE AVAILABLE] 0

2. 5,432,000, Jul. 11, 1995, Binder coated discontinuous fibers with adhered particulate materials; Richard H. Young, Sr., et al., 428/372, 357, 361, 373, 375, 378, 393 [IMAGE AVAILABLE]

3. RE 34,853, Feb. 7, 1995, Preparation of monolithic \*\*catalyst\*\* supports having an integrated high surface area phase; Thomas P. DeAngelis, et al., 502/439, 64, 263, 351, 355, 524, 527 [IMAGE AVAILABLE]

4. 4,637,995, Jan. 20, 1987, Preparation of monolithic \*\*catalyst\*\* supports having an integrated high surface area phase; Thomas P. DeAngelis, et al., 502/439, 64, 263, 351, 355, 524, 527 [IMAGE AVAILABLE]

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